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## **BALLISTIC PROTECTION MATERIALS**

## Saber Ben Abdessalem

University of Monastir, ENIM, Textile Materials and Processes Research Unit (MPTex), Monastir, Tunisia

Ballistic vests are composed of particular high performance clothing. They could be reinforced by one or two armor panels according to the protection level and are designed to resist to attacks intended to upper parts of the body to save lives of its wearers. The resistance behavior of ballistic body armor depends on several factors related to the ballistic fabric properties. The type of fabric, its thickness, its structure, its strength and strain, and the type of the employed resin are the most important factors. In this paper, the factors influencing the ballistic performances of soft armor panel and hard armor panel are presented. It also reports the various methods developed by the researchers to improve the performance of ballistic materials.

Keywords: Ballistic materials, Kevlar fiber, UHMWPE fiber, ballistic impact, shear thickening fluid